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| Name: | Date: |
| Course/Subject: Keystone Algebra I | Team: |
| Topic: Solving Linear Inequalities | School District: Blue Mountain |

Key Learning: Solving and graphing all different types of inequalities.

Unit Essential Question: How so we solve and graph inequalities to solve real world situations?

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| Concept: Solve and graph Simple and multi-step inequalities | Concept: Solve and graph compound inequalities | Concept: Solve and graph absolute value inequalities |
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| Lesson Essential Questions:   * How are inverse operations used to solve single and multi-step inequalities? * How does an inequality differ from an equation? * How does an equation differ from an inequality? (ET) | Lesson Essential Questions:   * How do you apply a Venn Diagram to and & or statements? * How do we solve and graph compound inequalities? * How are inverse operations used to solve and graph compound inequalities? * Explain how Venn diagrams can be used to solve inequalities. (ET) | Lesson Essential Questions:   * How do we solve and graph absolute value inequalities? * Explain the difference between greater than or less than inequalities. (ET) |
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| Vocabulary:   * Inequality * Set notation (solution) * Inverse operation | Vocabulary:   * Inverse operation * Compound inequality * Set notation * Slope-intercept form * Point-slope form | Vocabulary:   * Absolute value inequality * Set notation * Slope-intercept form * Point-slope form |
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| Additional Information/Resources:  PA Standards: 2.1, 2.8 | | |

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| Concept: Problem solving with inequalities | Concept: Solve and graph systems of linear inequalities | Concept: Graphing linear inequalities | Concept: | Concept: |
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| Lesson Essential Questions:   * How do we setup inequalities to solve problems? * How do we solve inequalities? * Explain the use of inequalities and give an example of real life situation. (ET) | Lesson Essential Questions:   * How do we solve and graph systems of linear inequalities? (more than one) * Explain how to find the solution of a system of linear inequalities. (ET) | Lesson Essential Questions:   * What are the different methods we can use to graph inequalities? * Compare and contrast two methods of graphing inequalities. (ET) | Lesson Essential Questions: | Lesson Essential Questions: |
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| Vocabulary:   * Inverse operations * Set notation * Inequality | Vocabulary:   * Inverse operations * Set notation * Slope-intercept form * Point-slope form | Vocabulary:   * Point-slope * Standard form * Slope-intercept form * X-intercept * Y-intercept * Linear inequality | Vocabulary: | Vocabulary: |